

ARCHIVES FOR METEOROLOGY, GEOPHYSICS, AND BIOCLIMATOLOGY

*Archiv für Meteorologie,
Geophysik und Bioklimatologie*

Series B

*Climatology, Environmental Meteorology,
Radiation Research*

Vol. 35, 1984/1985

ISSN 0066-6424

Edited by

F. Steinhauser, Wien

E. R. Reiter, Fort Collins, Colo.

Springer-Verlag Wien New York



The exclusive copyright for all languages and countries, including the right for photomechanical and any other reproductions including microform is transferred to the publisher

© 1984/1985 by Springer-Verlag/Wien

ARCHIVES
FOR METEOROLOGY,
GEOPHYSICS, AND
BIOCLIMATOLOGY

Founded by W. Mörikofer, Davos, and F. Steinhauser, Wien

Contents: Series B, Vol. 35, 1984/1985

No. 1—2

Reiter, R., K. Pötzl, and R. Sladkovic: Determination of the Concentration of Chemical Main and Trace Elements (Chemical Matrix) in the Aerosol from 1972 to 1982 at a North-Alpine Pure Air Station at 1 780 m a.s.l. Part II: Parametric Correlation Analysis of the Chemical Matrix with Consideration of Meteorological Quantities 1

Ohtaki, E., T. Maitani, and T. Seo: Atmospheric Carbon Dioxide Variations at Coastal Site, Shibukawa, in Seto Inland Sea, Japan 31

Dien, N. H.: An Anisotropic Model for Estimating of Hourly Sums of Solar Radiation on Vertical South-Facing Surfaces 45

Bründl, W., and P. Höppe: Advantages and Disadvantages of the Urban Heat Island — An Evaluation According to the Hygro-Thermic Effects . . 55

Hershfield, D. M.: Extreme Rainfall Intensities 67

Suppiyah, R., and M. M. Yoshino: Rainfall Variations of Sri Lanka, Part 2: Regional Fluctuations 81

Del Monte, M., and Cristina Sabbioni: Morphology and Mineralogy of Fly Ash from a Coal-Fueled Power Plant 93

Del Monte, M., and Cristina Sabbioni: Gypsum Crusts and Fly Ash Particles on Carbonatic Outcrops 105

Bergh, J.-E., and S. Israelsson: On the Occurrence of Very Low Frequency (VLF) Electromagnetic Radiation and Its Relation to Some Important Physical Conditions of the Atmosphere 113

Jacobs, A. F. G.: Static Pressure Around a Thin Barrier 127

Lemus, L., and C. Gay: Water-Body Reflectance: Dependence on Optical Depth 137

Stigter, C. J.: Mulching as a Traditional Method of Microclimate Management 147

No. 3

Schönwiese, C.-D.: Northern Hemisphere Temperature Statistics and Forcing. Part B: 1579–1980 AD 155


Reiter, R., W. Carnuth, and R. Sladkovic: Determination of Physical and Chemical Properties of the Aerosol from 1972 to 1982 at a North-Alpine Pure Air Station at 1780 m a.s.l. Part III: Aerosol Size Spectra	179
Mélice, J. L., A. Boughanmi, F. Eaton, and G. Wendler: Turbidity Measurements of Saharan Aerosol and Their Effects on Atmospheric Heating and Planetary Reflectivity	203
Webb, A., and M. D. Steven: Measurement of Solar UVB Radiation in the English Midlands.	221
Nathan, K. K.: A Note on the Relationship Between Photosynthetically Active Radiation and Light Intensity	233
Singh, N.: Fluctuations of Different Moisture Regimes in India	239
Hingane, L. S., and Bh. V. Ramana Murty: Growth Rates of Carbon Dioxide Emission in India.	257
Rupa Kumar, K.: Yield Response of Sugarcane to Weather Variations in Northeast Andhra Pradesh, India	265

No. 4

Van Dijk, W., and P. J. Jonker: Statistical Remarks on European Weather Types.	277
Cehak, K., and K. Chalupa: Observations of Various Chemical Contaminants of the Precipitation at a BAPMoN Station in the Eastern Pre-Alpine Region	307
Jung, H. J., and W. Bach: GCM-Derived Climatic Change Scenarios Due to a CO ₂ -Doubling Applied for the Mediterranean Area	323
Burkhardt, Th., and A. Hense: On the Reconstruction of Temperature Records from Proxy Data in Mid Europe	341
Hennemuth, Barbara, and H. Schmidt: Wind Phenomena in the Dischma Valley During DISKUS	361
Blumthaler, M., W. Rehwald, and W. Ambach: Seasonal Variations of Erythema Dose at Two Alpine Stations in Different Altitudes	389
Book Reviews	399

List of Authors

- Ambach, W. 389
- Bach, W. 323
- Bergh, J.-E. 113
- Blumthaler, M. 389
- Boughanmi, A. 203
- Bründl, W. 55
- Burkhardt, Th. 341
- Carnuth, W. 179
- Cehak, K. 307
- Chalupa, K. 307
- Del Monte, M. 93, 105
- Dien, N. H. 45
- Dijk, W. van 277
- Eaton, F. 203
- Gay, C. 137
- Hennemuth, Barbara 361
- Hense, A. 341
- Hershfield, D. M. 67
- Hingane, L. S. 257
- Höppe, P. 55
- Israelsson, S. 113
- Jacobs, A. F. G. 127
- Jonker, P. J. 277
- Jung, H. J. 323
- Lemus, L. 137
- Maitani, T. 31
- Mélice, J. L. 203
- Nathan, K. K. 233
- Ohtaki, E. 31
- Pötzl, K. 1
- Ramana Murty, Bh. V. 257
- Rehwald, W. 389
- Reiter, R. 1, 179
- Rupa Kumar, K. 265
- Sabbioni, Cristina 93, 105
- Schmidt, H. 361
- Schönwiese, C.-D. 155
- Seo, T. 31
- Singh, N. 239
- Sladkovic, R. 1, 179
- Steven, M. D. 221
- Stigter, C. J. 147
- Suppiah, R. 81
- Webb, A. 221
- Wendler, G. 203
- Yoshino, M. M. 81
- Book Reviews* 399



Digitized by the Internet Archive
in 2023 with funding from
Kahle/Austin Foundation

